## Accepted Manuscript

Title: The benefits and pitfalls of Post-mortem Computed Tomography in forensic external examination: a retrospective study of 145 cases.

Authors: Thibault Willaume, Audrey Farrugia, Estelle-Marie KIEFFER, Jeanne Charton, Annie Geraut, Laurent Berthelon, Guillaume Bierry, Jean-Sébastien Raul

PII: S0379-0738(18)30084-7

DOI: https://doi.org/10.1016/j.forsciint.2018.02.030

Reference: FSI 9188

To appear in: FSI

Received date: 7-9-2017 Revised date: 26-2-2018 Accepted date: 28-2-2018

Please cite this article as: Thibault Willaume, Audrey Farrugia, Estelle-Marie KIEFFER, Jeanne Charton, Annie Geraut, Laurent Berthelon, Guillaume Bierry, Jean-Sébastien Raul, The benefits and pitfalls of Post-mortem Computed Tomography in forensic external examination: a retrospective study of 145 cases., Forensic Science International https://doi.org/10.1016/j.forsciint.2018.02.030

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



### ACCEPTED MANUSCRIPT

# THE BENEFITS AND PITFALLS OF POST-MORTEM COMPUTED TOMOGRAPHY IN FORENSIC EXTERNAL EXAMINATION: A RETROSPECTIVE STUDY OF 145 CASES

#### **Authors:**

Thibault WILLAUME<sup>a\*</sup>, Audrey FARRUGIA<sup>b</sup>, Estelle-Marie KIEFFER<sup>a</sup>, Jeanne CHARTON<sup>a</sup>, Annie GERAUT<sup>b</sup>, Laurent BERTHELON<sup>b</sup>, Guillaume BIERRY<sup>b</sup>, Jean-Sébastien RAUL<sup>b</sup>

\*Corresponding author : Hôpital de Hautepierre, 1 avenue Molière 67098, Strasbourg, France. Tel : + 33 684556799. E-mail address : thibault.willaume@chru-strasbourg.fr

#### Other authors E-mail address:

- audrey.farrugia@unistra.fr / ORCID: 0000-0002-4453-1618
- estellemarie.kieffer@gmail.com
- jeanne.flesch@hotmail.fr
- ageraut@unistra.fr
- laurentberthelon@hotmail.com
- quillaume.bierry@chru-strasbourg.fr / ORCID: 0000-0002-0479-8676
- js.raul@unistra.fr

#### **Highlights:**

- PMCT complements EE results when no autopsy is performed
- PMCT can reveal a cause of death hidden from EE.
- PMCT can strengthen a presumed diagnosis based on the clinical findings of EE.
- Some specific injuries can be missed by PMCT.
- The exclusion of traumatic lesions on PMCT is a key point to assess natural death.

#### **ABSTRACT**

Objective: Nowadays, Post-mortem Computed Tomography (PMCT) has become an integral part of Forensic practice. The purpose of the study was to determine PMCT impact on diagnosis of the cause of death within the context of the external examination of the body, when autopsy has, at first, not been requested.

*Material and methods*: We reviewed the records of 145 cases for which unenhanced PMCT was performed in addition to the external examination of the body from January 2014 to July 2015 at the [name deleted to maintain the integrity of the review process]. We confronted final reports from forensic pathologist to the corresponding PMCT reports. Data were collected in a contingency table

<sup>&</sup>lt;sup>a</sup> Imaging Department, University Hospital of Strasbourg, Strasbourg, France

<sup>&</sup>lt;sup>b</sup> Institute of Legal Medicine, University of Strasbourg, Strasbourg, France

#### Download English Version:

# https://daneshyari.com/en/article/6551104

Download Persian Version:

https://daneshyari.com/article/6551104

<u>Daneshyari.com</u>